

5. (Original) A grinding apparatus as claimed in claim 4 wherein said first positioning means includes a first gear engaging said rail.
6. (Original) A grinding apparatus as claimed in claim 4 wherein said adjustable support means adjustably positions said motor-driven grinder relative to said lower slitter unit in a second direction substantially perpendicular to said first direction.
7. (Original) A grinding apparatus as claimed in claim 6 wherein said adjustable support means includes a second positioning means for selectively moving said motor-driven grinder with respect to said coupler, whereby said motor-driven grinder is adjusted in said second direction.
8. (Original) A grinding apparatus as claimed in claim 7 wherein said adjustable support means adjustably orients said motor-driven grinding wheel relative to said lower slitter unit about an axis substantially perpendicular to said first direction and said second direction.

### **REMARKS**

In the Office Action, the Examiner rejected this application on several grounds relating to the insufficiency of the disclosure. For example, the drawings were found objectionable for failing "to show the relationship between the guiding wheel (58) and the collar (24) as described in the specification." In a similar fashion, the Examiner objected to (i) the abstract; (ii) the specification; and (iii) the claims. Additionally, the Examiner rejected the claims under Section 112, second paragraph, for certain informalities.

Initially Applicant wishes to address the “insufficiency” concerns of the Examiner.

While the Applicant acknowledges that the engagement of the lower slitter unit 24 and grinding wheel 58 for the purpose of sharpening is not shown in the original drawing, it is unnecessary.

No novelty lies in the sharpening process.

The grinding process is well-known in this art and has been used for years. The grinding wheel itself is old and the orientation thereof (with respect to the slitter unit for sharpening) is old (as acknowledged by the amendment to FIGURE 1b, discussed below). This is how slitter units have been sharpened for years at off-site facilities. The invention here involves sharpening on-site, *i.e.*, with the grinding apparatus mounted on the rail carrying the upper slitter unit, as claimed.

Consequently, it is respectfully submitted that each and every “essential” feature of the present invention is shown in the drawing. It is further respectfully submitted that those skilled in the art would readily understand the specification and find therein a “full and complete description” of the invention. What the Examiner asserted to be missing is simply what is old and well-known.

To expedite prosecution, however, Applicant has amended FIGURE 1b to show the typical, conventional engagement of the cutter unit and guiding wheel, as requested by the Examiner. The description of that figure has also been amended to reflect the conventional nature of the engagement. Given these circumstances, no new matter is presented.

Regarding the drawing, the Examiner additionally asserts that it is “totally unclear how the grinding wheel moves along 3 axes to position itself against the collar to carry out the

grinding operation” (Office Action, p. 2). Applicant is confused by this assertion.

Positioning is a manual operation and described in detail. For example, the grinding wheel can be positioned along the rail 14 by rotation of the crank 60, as shown in FIGURES 1-4. Similarly, the grinding wheel may be adjusted vertically by rotation of the crank 84, as shown in FIGURES 3 and 5. The grinding wheel may be oriented with respect to the collar by means of the pin connection, as shown in FIGURES 2-4 and described at page 9, lines 3-14.

Next Applicant will address the other specification issues raised by the Examiner. First, with respect to the use of plural terms such as “units” and “blades,” it is respectfully submitted that FIGURE 1 is only a “partial” perspective view. As those skilled in the art will recognize, a paper cutting machine often has several mechanisms for cutting a paper web. *See, e.g.*, FIGURE 3 of cited U.S. Patent No. 4,210,045.

Applicant has reviewed the specification as it relates to the terms “grinding apparatus 36,” “grinder 40” and “grinding wheel 58”. It is respectfully submitted that the numbering is correct and that the terminology is consistent. The “grinding apparatus 36” represents the overall grinding system; the “grinder 40” corresponds to the motor-driven grinder within that system; and the “grinding wheel 58” is a component of the motor-driven grinder.

The Examiner further questions the statement (page 7) that the “adjustable support means 42 generally interposes and mechanically links the coupler 38 and motor-driven grinder 40.” It is respectfully submitted that, as shown in FIGURES 2-4, the adjustable support mechanism is physically between (or interposes) and operatively connects (or mechanically links) the coupler and grinder. Indeed the Examiner appears to question the subject language only to then accept it

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by noting that the “coupler [is] attached to rail (14) with a grinding apparatus attached there below” (Office Action, p. 3). Applicant has simply chosen words different from those preferred by the Examiner.

Finally, Applicant has amended the independent claim in accordance with the Examiner’s suggestion. In particular, it is now clear that the paper cutting mechanism includes “an upper slitter on a rail and an associated lower slitter unit.” It is now explicit that the grinding apparatus is comprised of the recited element, *i.e.*, a “coupler,” “motor-driven grinder” and “adjustable support means.”

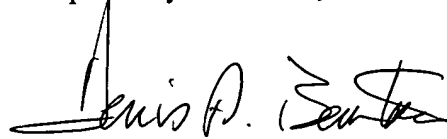
Further, the terminology “grinding wheel” has been deleted from claim 1. Thus, the antecedent basis problem relating to the “motor-driven grinder” has been cured.

Finally, Applicant submits herewith inked drawing (all figures) to replace the original penciled drawing. Two inadvertent, but obvious errors have been corrected in FIGURE 1 (as marked in red). In FIGURE 1a, the blade 20 is symmetrical (as now shown) with respect to the rail 14. In FIGURE 1b, the cross-hatching of the slitter unit 24 has been corrected. Acceptance is respectfully requested.

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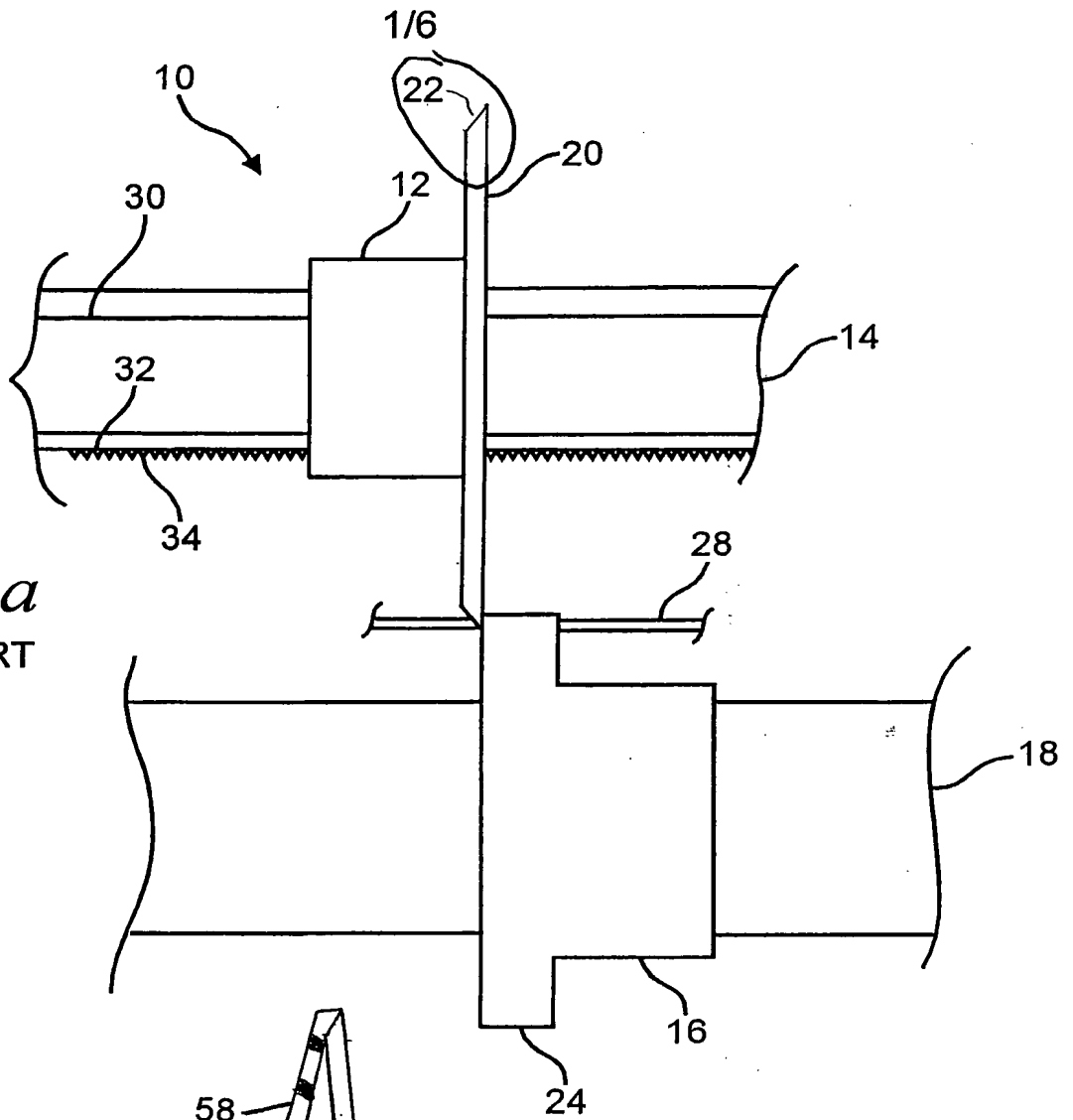
In view of the foregoing, it is respectfully submitted that this application is now in condition for allowance. Prompt, favorable action is therefore earnestly solicited.

Respectfully submitted,

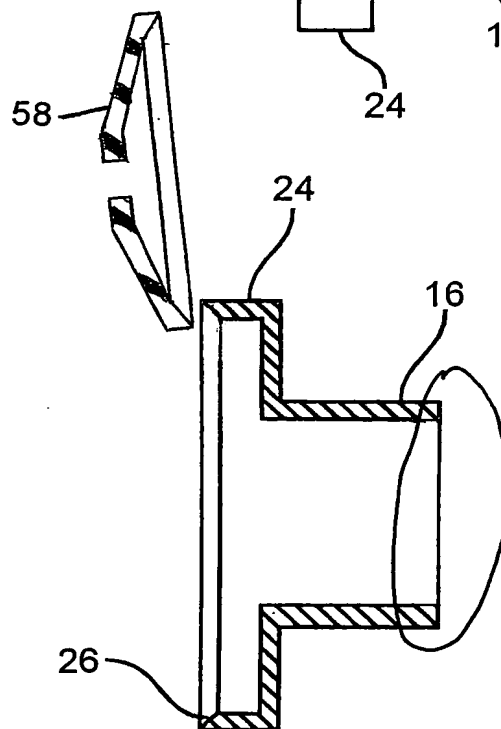
A handwritten signature in dark ink, appearing to read "Denis A. Berntsen", is written over a horizontal line.

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*Fig. 1a*  
PRIOR ART



*Fig. 1b*  
PRIOR ART